

Remarks

1. Summary of Office Action

In the Action mailed on July 28, 2005, the Examiner rejected claims 1 and 3-16 as being obvious over a combination of U.S. Patent No. 6,549,770 (Marran) and U.S. Patent No. 5,961,602 (Thompson). Further, the Examiner rejected claim 2 as being obvious over a combination of Marran, Thompson, and U.S. Patent No. 5,857,102 (Wright).

2. Status of claims

Applicants have cancelled claims 4, 6, 11, and 12. Applicants have also amended claims 1, 3, 5, 9, 13, and 15 to recite the invention more particularly.

Presently pending in this application are claims 1-3, 5, 7-10, and 13-17, of which claims 1, 3, 9, 15, and 17 are independent and the remainder are dependent. The Examiner has allowed claim 17.

3. Response to § 103 Rejections of Claims 1 and 3-16

As noted above, the Examiner rejected claims 1 and 3-16 on grounds of obviousness over a combination of Marran and Thompson. Applicants have cancelled claims 4, 6, 11, and 12, rendering the rejections of these claims moot.

i. The Claimed Invention

The presently claimed invention is directed to transmitting a data download to a mobile wireless unit.

In this regard, each of independent claims 1, 3, 9, and 15 (and each of dependent claims 5, 7, 8, 10, 13, 14, and 16 by virtue of their dependence on a respective claim 1, 3, 9, or 15), as amended above, recites in various ways the function of: (i) providing at least one priority data structure defining at least one transmission rule, where the at least one priority data structure

comprises a priority mapping table indicating a priority assigned to the data download based at least on a number of attempts to transmit the data download to the mobile wireless unit *and* (ii) transmitting the data download to the mobile wireless unit in accordance with at least the priority indicated by the priority mapping table.

For example, independent claim 1 recites a method involving “establishing in a data storage medium at least one priority data structure that defines the at least one transmission rule, wherein the at least one priority data structure comprises a priority mapping table indicating a priority assigned to a data download based at least on a number of attempts to transmit the data download to the mobile wireless unit” and “automatically transmitting the data download to the mobile wireless unit in accordance with at least the priority indicated by the priority mapping table.”

As another example, independent claim 3 recites a system including “a controller communicatively coupled to the database, wherein the controller is programmed to format at least one transmission rule into at least one priority data structure, the at least one priority data structure comprising a priority mapping table indicating a priority assigned to the data download based at least on a number of attempts to transmit the data download to the mobile wireless unit”, “wherein the controller transmits the data download to the mobile wireless unit in accordance with at least the priority indicated by the priority mapping table.”

Similarly, independent claim 9 recites a system including “a business logic server, the business logic server being communicatively coupled to the database, the business logic server receiving at least one transmission rule, wherein the business logic server is programmed to format the at least one transmission rule into at least one priority data structure, the at least one priority data structure comprising a priority mapping table indicating a priority assigned to the

data download based at least on a number of attempts to transmit the data download to the mobile wireless unit” and “a network logic server, the network logic server being communicatively coupled to the business logic server, the network logic server receiving from the business logic server the at least one priority data structure and the data download and, wherein the network logic server transmits the data download to the mobile wireless unit in accordance with the priority indicated by the priority mapping table.”

Further, independent claim 15 recites a network logic server including “a processing module, said processing module receiving from a business logic server at least one priority data structure and a data download, the at least one priority data structure defining at least one transmission rule, wherein the at least one priority data structure comprises (i) a priority mapping table indicating a priority assigned to the data download based at least on a number of attempts to transmit the data download to a mobile wireless unit and (ii) a resource allocation table indicating at least an amount of processor resources associated with the priority assigned to the data download, and, wherein the processing module transmits the data download to the mobile wireless unit in accordance with at least the priority indicated by the priority mapping table, and wherein, when transmitting the data download to the mobile wireless unit, the processing module uses the amount of processor resources indicated by the resource allocation table.”

**ii. The Combination of Marran and Thompson
Does Not Teach the Claimed Invention**

Applicants respectfully traverse the rejections of claims 1, 3, 5, 7-10, and 13-16, because the combination Marran and Thompson fails to disclose or suggest all of the claim limitations of any of these claims, as would be required to establish the required *prima facie* case of obviousness under M.P.E.P. § 2143.

More particularly, the proposed combination of Marran and Thompson fails to teach or suggest at least the claimed function of: (i) providing at least one priority data structure defining at least one transmission rule, *where the at least one priority data structure comprises a priority mapping table indicating a priority assigned to a data download based at least on a number of attempts to transmit the data download to a mobile wireless unit and* (ii) transmitting the data download to the mobile wireless unit *in accordance with at least the priority indicated by the priority mapping table.*

To illustrate, in one example of this claimed function, the priority mapping table may be a table having (i) a priority column, (ii) one or more number of attempts columns (e.g., a number of peak attempts column and a number of off-peak attempts column), and (iii) a plurality of rows, where each row defines a transmission rule. Each row may include (i) an assigned priority and (ii) a number of attempts to download data to a mobile wireless unit.

For instance, a first row may assign priority 1 (the highest priority) to a data download where there have been three attempts (e.g., three off-peak hour attempts) at transmitting the data download to the mobile wireless unit. A second row may then assign priority 2 to a data download where there have been two attempts (e.g., two off-peak hour attempts) at transmitting the data download to the mobile wireless unit, and so on.

A network entity, such as a network logic server, may then transmit a given data download to the mobile wireless unit according to a priority assigned to the given data download in the priority mapping table.

Marran discloses an expert system that receives various network administration data and analyzes that data by applying a set of rules to determine what programming data needs to be downloaded to a mobile digital device. In this regard, the expert system triggers a wireless

network to establish a data link with the device and downloads the necessary data to the device over-the-air. (See Marran, e.g., “Summary of the Invention”).

As noted by the Examiner, Marran, for example, discloses that the expert system may keep track of how many times a subscriber roams into new areas. The expert system may then use that information to trigger a download of parameter data to a subscriber’s phone (e.g., the expert system’s rules may dictate that the system download a new SID to a subscriber’s phone if a subscriber uses their phone three times in a new area). (See Marran, col. 13, lines 3-28).

Applicants, however, do not find in the above example or other disclosure in Marran any suggestion or teaching of the function that is presently claimed by Applicants and recited above.

At best, at col. 13, lines 29-42, Marran generally discloses that the expert system waits to receive a signal from a subscriber’s phone that parameter data was successfully downloaded to the phone. In case the phone does not send such signal, the expert system updates network administration data accordingly and attempts to make the download at a later time.

However, this general disclosure in Marran of the expert system noting a failed download attempt and attempting to make the download to a mobile phone at a later time does not teach or suggest the *particular* function of: (i) providing at least one priority data structure defining at least one transmission rule, *where the at least one priority data structure comprises a priority mapping table indicating a priority assigned to a data download based at least on a number of attempts to transmit the data download to a mobile wireless unit* and (ii) transmitting the data download to the mobile wireless unit *in accordance with at least the priority indicated by the priority mapping table*, as recited in various ways in each of claims 1, 3, 5, 7-10, and 13-16.

Further, Applicants respectfully submit that Thompson fails to make up for these deficiencies of Marran with respect to claims 1, 3, 5, 7-10, and 13-16.

Thompson teaches a method of downloading web content to a client during, for example, an off-peak download period. A user defines a set of one or more servers from which content is to be retrieved and cached. The content is then downloaded from these servers during the download period.

However, Thompson, like Marran, does not teach or suggest transmitting a data download to a mobile wireless unit in the manner presently claimed by Applicants.

Namely, Thompson does not teach or suggest (i) providing at least one priority data structure defining at least one transmission rule, *where the at least one priority data structure comprises a priority mapping table indicating a priority assigned to a data download based at least on a number of attempts to transmit the data download to a mobile wireless unit and* (ii) transmitting the data download to the mobile wireless unit *in accordance with at least the priority indicated by the priority mapping table.*

Further, independent claim 15 (and similarly each of dependent claims 5 and 13) recites additional limitations of: the at least one priority data structure further comprising *a resource allocation table indicating at least an amount of processor resources associated with the priority assigned to the data download and using the amount of processor resources indicated by the resource allocation table when transmitting the data download to the mobile wireless unit.*

By way of example, the resource allocation table may be a table having (i) a priority column, (ii) a resource allocation percentage column, and (iii) a plurality of rows, where each row defines a transmission rule. Each row may indicate a percentage of processor resources associated with a given priority. For instance, data downloads assigned priority 1 (the highest priority) may get fifty percent of processor resources while data downloads assigned a lower priority may get less processor resources.

A network entity, such as a network logic server, may then use the amount of processor resources indicated by the resource allocation table when transmitting a data download assigned the given priority.

Applicants respectfully submit that the combination of Marran and Thompson also fails to teach or suggest these additional claim limitations as recited in each of claims 5, 13, and 15.

To the extent relevant, Thompson merely teaches monitoring an activity level on a communication link as content is being downloaded from web servers. If the activity level is less than a given threshold level (e.g., some peak usage criteria between 0-100%), content downloads from the servers can be “load balanced” to ensure that a user obtains as broad range of content as is possible during a limited download period. (*See* Thompson, *e.g.*, col. 8, line 48, to col. 10, line 22).

Because the combination of Marran and Thompson fails to disclose or suggest all of the claim limitations of any of claims 1, 3, 5, 7-10, and 13-16, a *prima facie* case of obviousness does not exist.

4. Response to § 103 Rejections of Claim 2

As further noted above, the Examiner rejected claim 2 on grounds of obviousness over a combination of Marran, Thompson, and Wright. Applicants traverse the rejection of claim 2, because the cited combination does not teach all of the elements of claim 2, as would be required to establish a *prima facie* case of obviousness.

Claim 2 depends on claim 1 and necessarily incorporates all of the limitations of claim 1. As discussed above, the combination of Marran and Thompson fail to teach or suggest the invention of claim 1. Therefore, the combination of Marran and Thompson also fails to teach or

suggest the invention as recited in claim 2. Further, Applicants respectfully submit that Wright fails to overcome the deficiencies of Marran and Thompson described above.

In particular, Wright does not teach or suggest at least the claimed function of: (i) providing at least one priority data structure defining at least one transmission rule, where the at least one priority data structure comprises a priority mapping table indicating a priority assigned to a data download based at least on a number of attempts to transmit the data download to a mobile wireless unit *and* (ii) transmitting the data download to the mobile wireless unit in accordance with at least the priority indicated by the priority mapping table.

Because the combination of Marran, Thompson, and Wright fails to disclose or suggest all of the limitations of claim 2, a *prima facie* case of obviousness does not exist.

Applicants do not concede that the representations made more specifically by the Examiner with respect to dependent claim 2 are correct. However, Applicants submit that those other points are moot in view of the fact that the cited combination fails to teach or suggest the invention as recited in independent claim 1.

5. Comments on Allowable Subject Matter

Applicants thank the Examiner for allowing claim 17.

6. Conclusion

In summary, Applicants respectfully submit that each of pending claims 1-3, 5, 7-10, and 13-17 is allowable. Therefore, favorable reconsideration and allowance is requested.

Respectfully submitted,
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